

Application No.: 10/023,354

Docket No.: 65890-0002

AMENDMENTS TO THE CLAIMS

1. (Cancelled)
2. (Presently Amended) The modular automation apparatus as recited in claim 31, wherein said automation module communicates electronically with said base unit.
3. (Original) The modular automation apparatus as recited in claim 2, wherein said automation module communicates with said base unit through an electrical conduit.
4. (Cancelled)
5. (Presently Amended) The modular automation apparatus as recited in claim [4]31, wherein said platform includes at least one automation device disposed thereon.
6. (Cancelled)
7. (Presently Amended) The modular automation apparatus as recited in claim [6]31, wherein said information comprises at least one of automation specific logic rules and data.
8. (Cancelled)
9. (Presently Amended) The modular automation apparatus as recited in claim 31, wherein said predetermined control function provided by said base unit comprises the generation of signals required to operate said automation module.

Application No.: 10/023,354

Docket No.: 65890-0002

10. (Presently Amended) The modular automation apparatus as recited in claim 31, wherein said base unit comprises a frame having a control cabinet affixed thereto.

11. (Original) The modular automation apparatus as recited in claim 10, wherein said control cabinet houses at least one control device.

12. (Original) The modular automation apparatus as recited in claim 11, wherein said control device comprises a programmable logic controller.

13. (Original) The modular automation apparatus as recited in claim 11, wherein said control device comprises a power supply capable of powering said base unit and said automation module.

14. (Original) The modular automation apparatus as recited in claim 10, wherein said control cabinet houses at least one automation specific control device.

15. (Original) The modular automation apparatus as recited in claim 14, wherein said automation specific control device comprises an automation device controller.

16. (Presently Amended) The modular automation apparatus as recited in claim 31, wherein said automation module includes a user interface.

17. (Original) The modular automation apparatus as recited in claim 16, wherein said user interface is configured to prompt a user to perform predetermined operation steps.

Application No.: 10/023,354

Docket No.: 65890-0002

18. (Original) The modular automation apparatus as recited in claim 17, wherein said user interface is configured to accept user input responsive to prompting by said control unit.

19. (Original) The modular automation apparatus as recited in claim 16, wherein said user interface comprises a touch sensitive display.

20. (Original) The modular automation apparatus as recited in claim 16, wherein said predetermined control function provided by said base unit comprises the generation of control signals required to operate said user interface.

21. (Presently Amended) The modular automation apparatus as recited in claim 31, wherein said base unit further includes at least one safety device configured to prevent operation of said automation apparatus during a predetermined event.

22. (Presently Amended) The modular automation apparatus as recited in claim 21 32, wherein said safety device comprises a light curtain electronically controlled by said base unit, whereby when a user reaches through said light curtain into said automation module during said function preformed by said automation module that could result in injury [said predetermined event], said base unit terminates operation of said automation module.

23. (Original) The modular automation apparatus as recited in claim 5, wherein said automation module includes a remote input-output device that communicates with said base unit for selectively controlling operation of said automation device.

24. (Presently Amended) The modular automation apparatus as recited in claim 31, wherein said predetermined automation function comprises manufacturing a product.

Application No.: 10/023,354

Docket No.: 65890-0002

25. (Presently Amended) The modular automation apparatus as recited in claim 31, wherein said predetermined automation function comprises verifying a product.

26. (Presently Amended) The modular automation apparatus as recited in claim 31, further including a storage rack for storing automation modules awaiting connection to said base unit.

27. (Original) A modular automation apparatus, comprising:
a base unit and an automation module;

said base unit comprising a frame having a control cabinet affixed thereto that houses at least one programmable logic controller providing predetermined control function, said base unit adapted to receive an automation module;

said automation module comprising a frame having a platform upon which at least one automation device is disposed, a selectively programmable memory device for storing logic rules to control said predetermined automation function, and a remote input-output device that communicates with said programmable logic controller for selectively controlling operation of said automation device, said automation module configured to mate with said base unit; and

wherein when said base unit and a corresponding automation module are cooperatively assembled, said memory device downloads said logic rules into said programmable logic controller for execution, said programmable logic controller communicating with said remote input-output device in accordance with the executed logic rules to perform one or more predetermined automation functions.

28. (Original) A method of assembling an automation apparatus configured to perform one or more automation functions comprising:

providing an automation apparatus comprising a base unit providing predetermined control function and an automation module providing predetermined automation function, the automation module including at least one selectively programmable memory device for storing information to be transferred into the base unit, the automation apparatus capable of performing

Application No.: 10/023,354

Docket No.: 65890-0002

one or more predetermined automation functions when said base unit and said automation module are cooperatively assembled;

assembling said automation module with said base unit to form a unitary automation apparatus; and

downloading the stored information from said memory device into said base unit.

29. (Original) The method according to claim 28, wherein the step of assembling the automation module with the base unit includes connecting an electrical conduit between the base unit and the automation module.

30. (Original) The method according to claim 28, wherein the stored information includes at least one of logic rules and data.

31. (New) A modular automation apparatus, comprising:

a base unit and an automation module;

said base unit providing predetermined control function, said base unit adapted to receive an automation module that is configured to mate with said base unit, wherein said automation module includes a frame having a platform and further includes at least one selectively programmable memory device for storing information;

said automation module providing predetermined automation function, wherein said selectively programmable memory device for storing information is used to control said predetermined automation function;

wherein when said base unit and said automation module are cooperatively assembled, the combination is capable of performing one or more predetermined automation functions; and

wherein upon connection of said automation module to said base unit, said memory device downloads the stored information into said base unit.

Application No.: 10/023,354

Docket No.: 65890-0002

32. (New) A modular automation apparatus, comprising:

a base unit and an automation module;

said base unit providing predetermined control function, said base unit adapted to receive an automation module;

said automation module providing predetermined automation function, said automation module configured to mate with said base unit;

wherein when said base unit and said automation module are cooperatively assembled, the combination is capable of performing one or more predetermined automation functions; and

wherein said base unit further includes at least one safety device configured to prevent operation of said automation apparatus during a function performed by said automation module that could result in injury to a user or to said automation apparatus.